



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/992,362

11/14/2001

Jun Akiyama

56693 (70904)

5592

21874

7590

10/27/2008

EDWARDS ANGELL PALMER & DODGE LLP

P.O. BOX 55874

BOSTON, MA 02205

EXAMINER

POLTORAK, PIOTR

ART UNIT

PAPER NUMBER

2434

MAIL DATE

DELIVERY MODE

10/27/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/992,362	AKIYAMA, JUN	
	Examiner	Art Unit	
	PETER POLTORAK	2434	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/07/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) 17-24 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)
2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____. | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) <input type="checkbox"/> Notice of Informal Patent Application
6) <input type="checkbox"/> Other: _____. |
|---|--|

DETAILED ACTION

1. The amendment filed on 8/07/08 has been entered.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Response to Amendment

2. Applicant's arguments with respect to newly introduced limitations are addressed in paragraph 7 of this Office Action, below.

Claim Objections

3. Claim 3 remains objected: the term "user" in claim 3 should read either "a user" or "users".

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. Claims 1-9, 11-14 and 16 are rejected under 35 U.S.C. 103(a) as being obvious over Nagai (USPN 6938162) in view of Inazawa (U.S. Patent No. 6587948) and Tosaki (WO 00/07182), and further in view of Nagai (U.S. Patent No. 6938162).

As per claims 1-2, 7-8 and 11 Nagai discloses encrypting information (user data) in data recording region (user data area, 102) using the encryption information (descramble keys) which was reproduced in the second format from the encryption data recording region (key management information area, 107) in a recording medium (disc, Fig. 1), wherein the recording system is rewritable recording system

(e.g. Fig. 19) and the encryption data recording region is configured to be rewritten with the encryption information (col. 16 lines 14-15).

5. Nagai does not teach that the encryption information is different for different disks, such that the encryption information recorded on each disk is different.

Inazawa disclose the encryption information is different for different disks, such that the encryption information recorded on each disk is different (Inazawa et al., col. 6 lines 8-10). One of ordinary skill in the art at the time of applicant's invention would have been motivated to employ the encryption information that is different for different disks, such that the encryption information recorded on each disk is different given benefits of tracking and additional copyright protection.

Even if Nagai in view of Inazawa did not teach that the second format and the first format differ from each other in at least one of recording density, error correcting system and defect management system, (for example the limitation requiring that the first format differ from each other in recording density)

6. Nagai in view of Inazawa do not teach that the first format differ from each other in a recording density. Thus, Nagai in view of Inazawa also do not explicitly teach that the first format (the data recording region) differs from the second format (the encryption data recording region) in at least one of recording density, error correcting system and defect management system and, as a result, as per the limitations of claim 4-5 and 12-13, Nagai in view of Inazawa do not teach that the recording density of the second format is lower than that of the first format and that the second format reproduces information with a better reproduction quality than the first format.

Tosaki discloses the recording density of the second format (the area storing the encryption data recording region) being lower than the first format (the data recording region, col. 3 lines 1-2 and col. 2 lines 48-50). Although higher data density allows to store more information in data region, it affects negatively quality of data reproduction (higher density results in lower reproduction quality, see Nakane 6091699, for example). An ordinary artisan in the art of data recording would readily recognize that user data such as music, movies, etc., require much more space than "support" data (e.g. encryption information, metadata etc.). At the same time, unlike the user data, in which problems with subset of data does not affect the overall data, any problems with the support data could impact the reproduction of all user data (e.g. corrupted decryption key would not allow decryption of all encrypted user data). Thus, while the ordinary artisan would seek maximization of amount data, which can be accomplished by using a higher density format (note a progression from legacy CDs to higher density CDs such as DVDs in order to accommodate increasing demand for user data space, for example), ensuring to preserve the quality of the support data, such as the encryption data disclosed by Nagai (and Tosaki) would clearly be more important than maximization of the amount of the support data stored in the region.

Thus, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention to ensure that the second format reproduces information with a better reproduction quality than the first format given the benefit of saving space in

the first data format region while ensuring the proper (usable) reproduction of the data kept in the first format region.

7. Although Nagai in view of Inazawa and further in view of Tosaki disclose recording encrypted information in the recording region, they don't disclose recording additional data indicative of copyright information, wherein the encryption of information is based on the copyright information.

Nagai discloses recording additional data indicative of copyright information, wherein the encryption of information is based on the copyright information (Nagai, col. 2 lines 37-64 and col. 55 lines 37-48). It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to include recording additional data indicative of copyright information, wherein the encryption of information is based on the copyright information as taught by Nagai, given the benefit of enforcing security in accordance with the level of copyright protection level.

8. The limitations of claim 6 are inherent; Nagai explicitly disclose that the invention is relevant to disks such as CD and DVD (e.g. col. 1 lines 26-49), and any data (such as keys disclosed by Nagai) recorded on recording medium such as CD and DVD is recorded at the plural different positions in a circumferential direction.
9. As per claim 3, recording regions are blank before information is recorded.
10. As per claims 9 and 14, density is influenced by signal modulation; thus, recording to two different density regions would inherently require two different types of modulation.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached Monday through Thursday from 9:00 a.m. to 4:00 p.m. and alternate Fridays from 9:00 a.m. to 3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on (571) 272-3811. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Art Unit: 2434

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peter Poltorak/

Examiner, Art Unit 2134

/Kambiz Zand/

Supervisory Patent Examiner, Art Unit 2434